

### Emergency Department Visits, Hospital Discharges, and Death Rates

Though there is frequently focus on the causes of mortality among adolescents, examination of morbidity and mortality provides a more complete picture of the health status of that population. Emergency department and inpatient hospital utilization data provide information on morbidity that was sufficiently serious to result in either emergency department or inpatient hospital use.

■ In 1995–97 adolescents 10–19 years of age made an average of 11.6 million visits to emergency departments annually and had an average of 1.6 million hospitalizations per year. In 1996–97 about 19 thousand adolescents died each year. In general, emergency department use, hospitalizations, and mortality increased with age, but patterns varied by sex.

■ Emergency department visit rates for male adolescents 18–19 years of age were 1.6 times the rate for those 10 years of age. For female adolescents, the rates at age 18–19 years were 2.5 times that at age 10 years. From age 10 through about age 16 years, emergency department visit rates for males and females were similar. At age 16 years, visit rates began to increase more rapidly among females primarily because of conditions related to pregnancy and sexual activity (see figure 12).

■ Hospital discharge rates increased with age. The hospital discharge rate for male adolescents 19 years of age was 1.5 times the rate for those 10 years of age. In contrast, among female adolescents 19 years of age the discharge rate was nearly 9 times the rate for those 10 years of age. For male and female adolescents 11–13 years of age, discharge rates were similar, but from ages 14–19 years, the rate for females was higher than that for males with differences increasing with age. Hospitalization for pregnancy and delivery was the cause of those differences (see figure 13).

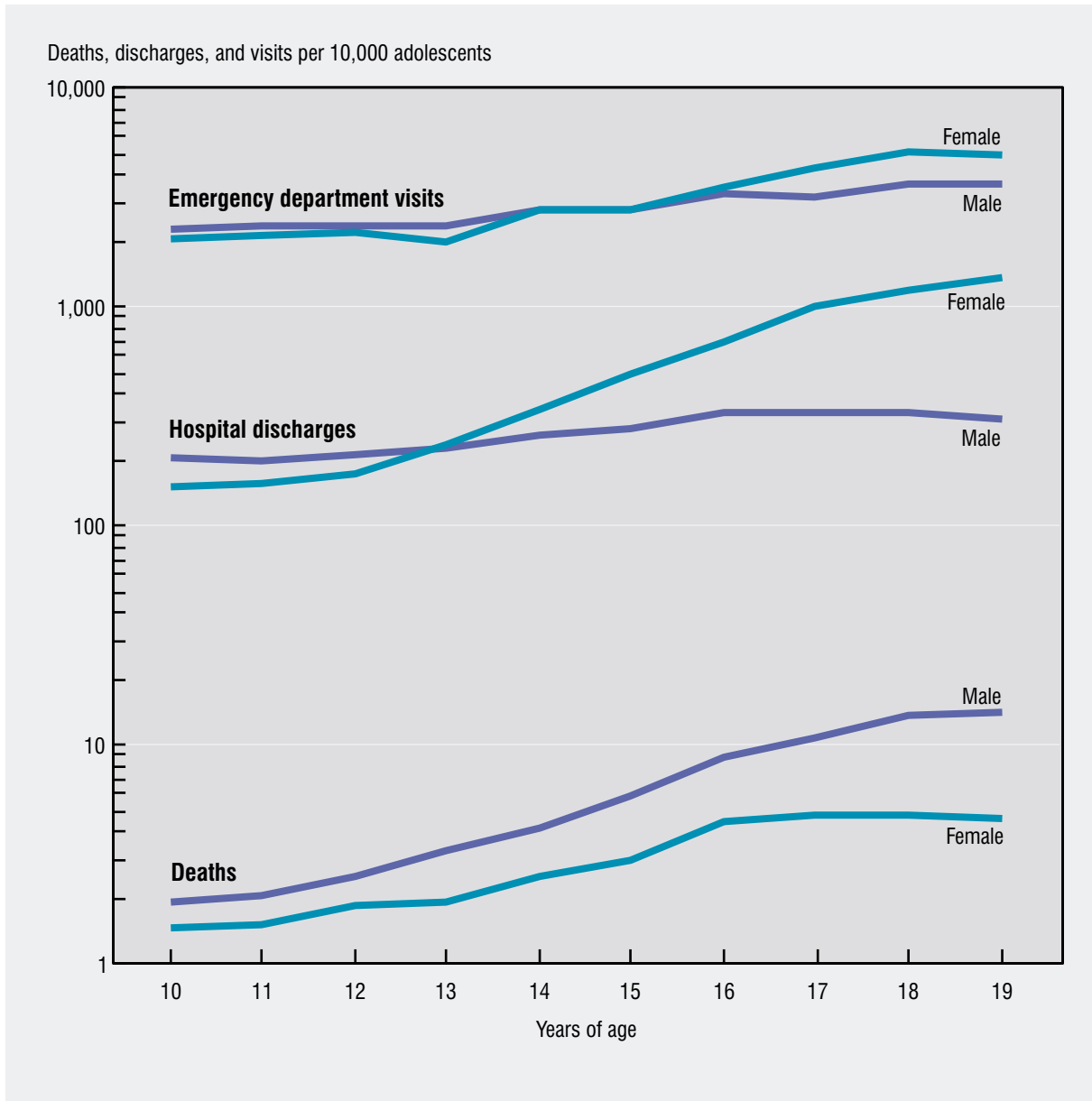
■ Mortality among female and male adolescents did not follow the same pattern observed for emergency department and hospital utilization. Death rates for male adolescents exceeded those for female adolescents at each age and the difference increased substantially with age. These differences were primarily due to the age-related increases in injury mortality among males (see figures 16 and 17).

■ The death rate for males 19 years of age was 8 times the rate of those 10 years of age. For females the death rate at age 19 was 3 times the rate at age 10. (Note: death rates are generally shown as per 100,000 population, but for comparability to morbidity measures, they are shown only in figure 8 as per 10,000.) Reduction of adolescent mortality is a Healthy People 2010 critical adolescent objective (1).

#### Reference

1. U.S. Department of Health and Human Services. Healthy People 2010 (Conference Edition, in Two Volumes). Washington: 2000.

Figure 8. Emergency department visit rates, hospital discharge rates, and death rates among adolescents 10–19 years of age, by age and sex: United States, average annual 1995–97



NOTES: Death rates are for 1996–97 only. See Appendix I, National Hospital Ambulatory Medical Care Survey and National Hospital Discharge Survey; Appendix II, Cause of Death, and Rate: Death. See Data Table for data points graphed.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey (NHAMCS); National Hospital Discharge Survey (NHDS); National Vital Statistics System.